



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 152916

TO: Kevin Weddington
Location: Rem 3 C 70
Art Unit: 1614
Thursday, May 12, 2005

Case Serial Number: 10/620794

From: Mary Jane Ruhl
Location: Biotech-Chem Library
Remsen 1-A-62
Phone: 571-272-2524

maryjane.ruhl@uspto.gov

Search Notes

Examiner Weddington,

Here are the results for your recent search request.

Please feel free to contact me if you have any questions about these results.

Thank you for using STIC services. We appreciate the opportunity to serve you.

Sincerely,

Mary Jane Ruhl
Technical Information Specialist
STIC
Remsen 1-A-62
Ext. 22524



REM.- 3670.

152918
Access DB#

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: K. Weddington Examiner #: 68082 Date: 5-6-05
Art Unit: 1614 Phone Number 302-272-0587 Serial Number: 104620, 794
Mail Box and Bldg/Room Location: 3A65 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): Jeff J. Staggs

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Treating bacterial infections with
black pepper.

RECEIVED
MAY - 9 2005
(STIC)

STAFF USE ONLY

Type of Search

Vendors and cost where applicable



STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact *the searcher or contact:*

Mary Hale, Information Branch Supervisor
Remsen Bldg. 01 D86
571-272-2507

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library Remsen Bldg.



=> d his ful

FILE 'HCAPLUS' ENTERED AT 16:33:18 ON 12 MAY 2005

E STAGGS JEFF J/AU

L27

1 SEA ABB=ON "STAGGS J"/AU

not related topic, Therefore no "inventor" results

FILE 'REGISTRY' ENTERED AT 16:34:42 ON 12 MAY 2005

E BLACK PEPPER/CN

L28

1 SEA ABB=ON "BLACK PEPPER OIL"/CN

FILE 'HCAPLUS' ENTERED AT 16:35:19 ON 12 MAY 2005

L29

931 SEA ABB=ON L28 OR ?BLACK?(W)?PEPPER?

L30

5 SEA ABB=ON L29 AND ?BACT?(W)?INFECT?

5 cit's from CAPLUS

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT
16:38:06 ON 12 MAY 2005

L31

6 SEA ABB=ON L30

L32

6 DUP REMOV L31 (0 DUPLICATES REMOVED)

6 cit's from other db's

\$%^STN;HighlightOn=;HighlightOff=;

=> d que stat l30

L28 1 SEA FILE=REGISTRY ABB=ON "BLACK PEPPER OIL"/CN
L29 931 SEA FILE=HCAPLUS ABB=ON L28 OR ?BLACK?(W)?PEPPER?
L30 5 SEA FILE=HCAPLUS ABB=ON L29 AND ?BACT?(W)?INFECT?

=> d ibib abs l30 1-5

L30 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:544714 HCAPLUS

DOCUMENT NUMBER: 122:306478

TITLE: Some pharmacodynamic effects and antimicrobial activity of essential oils of certain plants used in Egyptian folk medicine

AUTHOR(S): Ramadan, A.; Afifi, N. A.; Fathy, M. M.; El-Kashoury, E. A.; El-Naeneey, E. V.

CORPORATE SOURCE: Faculty of Veterinary Medicine, Cairo University, Giza, Egypt

SOURCE: Veterinary Medical Journal Giza (1994), 42(1(B)), 263-70

CODEN: VMJGEA; ISSN: 1110-1423

PUBLISHER: Cairo University, Faculty of Veterinary Medicine

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In this study ten essential oils were prepared from their resp. natural sources namely Cinnamomum cassia bark (cassia), Curcuma sp. rhizomes (curcuma), Elettaria cardamomum fruit (cardamom), Eugenia caryophyllus flower buds (clove), Origanum syriacum herb (za'tar), Origanum majoranum herb (sweet marjoram), Piper nigrum fruit (**black pepper**), Rosmarinus officinalis leaves (rosemary), Salvia triloba L. (maryamiyah), and Zingiber officinalis rhizomes (ginger). Their percentage yields, specific gravities and refractive indexes were determined. The essential oils of ginger and **black pepper** markedly stimulated the motility of rabbit jejunum at concns. greater than 47.2 and 70.0 µg/mL, resp. The other essential oils possessed intestinal antispasmodic effects on isolated rabbit's jejunum. All tested oils produced inhibitory effect on pregnant rat uterus. In the antimicrobial study, the sensitivity of 19 microbes (6 Gram-pos. and 6 Gram-neg. bacteria, and 7 fungi) to tested essential oils was investigated at different concns. (10, 25, 50, 100 and 200 mg/mL). Cassia oil showed a pronounced antibacterial activity against all tested bacteria in vitro. Essential oils of cardamom, curcuma, za'tar, sweet marjoram and maryamiyah showed a moderate antibacterial activity. Results of the antifungal study showed that cassia and clove essential oils caused a pronounced antifungal activity in vitro and in vivo. Curcuma, za'tar and sweet marjoram showed a marked activity against Trichophyton mentagrophytes. Za'tar showed also a moderate inhibitory activity against the other tested fungi.

L30 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:162635 HCAPLUS

DOCUMENT NUMBER: 114:162635

TITLE: Effect of reducing components in spice oils on the nitrite role in model meat systems

AUTHOR(S): Kim, In Ho; Lee, Seong Ki; Kim, Ze Uook

CORPORATE SOURCE: Dep. Food Sci. Technol., Seoul Natl. Univ., Suwon, 440-744, S. Korea

SOURCE: Han'guk Nonghwa Hakhoechi (1990), 33(2), 147-53

CODEN: JKACA7; ISSN: 0368-2897

DOCUMENT TYPE: Journal

LANGUAGE: Korean

AB To investigate the effect of spice oils on the activity of nitrite in processed meat products, spice oils, ascorbic acid, and nitrite in different combinations were added to ground pork, and cooked at 70° for 30 min or 121° for 15 min. The cooked samples were stored at 5.5° for 12 days and pH, residual nitrite, redness, TBA value, and antimicrobial activity were measured. The pH of the uncooked samples was stable at 5.6-5.8 except in samples with nitrite alone, anise, ascorbic acid, and **black pepper**, in which the pH increased to 6.7-7.8 after 5 days of storage. The pH of the cooked samples was stable at 5.9-6.1 during storage. Residual nitrite decreased rapidly on the first day of storage in each model. The nitrite-reducing effect was greatest in samples containing ascorbic acid, followed by clove oil, eugenol and thyme oil, but was low with peppermint oil. The redness of the sample was increased with ascorbic acid, eugenol, and clove, thyme, anise, **black pepper**, coriander, and rosemary oils, but not peppermint oil. The TBA values of the samples with clove oil, eugenol, and ascorbic acid, stored for 9 days, were lower than in nitrite-containing samples, and indicated strong antioxidant activity. The antimicrobial activity (determined by inhibition zone) against *Penicillium* was strong in samples containing eugenol or clove, peppermint, thyme, coriander, **black pepper**, rosemary, or anise oils, and all samples had 7-10 mm inhibition zones for *Salmonella*. Thus, the addition of eugenol or clove and thyme oils to processed meat may increase the antioxidant and antimicrobial activities, and the redness of the product, allowing a decrease in nitrite addition

L30 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1987:38300 HCAPLUS

DOCUMENT NUMBER: 106:38300

TITLE: Antibacterial and antitumor activities of piperine from **black pepper**

AUTHOR(S): Yamaguchi, Isao; Ozeki, Sachiko

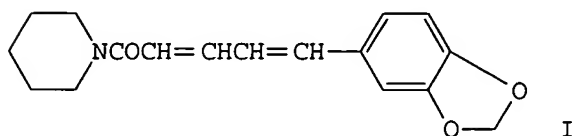
CORPORATE SOURCE: Tokyo Kasei Daigaku, Tokyo, Japan

SOURCE: Kenkyu Kiyo - Tokyo Kasei Daigaku (1985), 25, 201-3
CODEN: TKDKBL; ISSN: 0371-831X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Piperine (I) [94-62-2] was isolated from **black pepper** by extraction with CHCl_3 , and purification of the extract by silica gel column chromatog. I was bioassayed in vitro against 27 species of bacteria, and had activity against *Pseudomonas aeruginosa* and *Alcaligenes F2518*. I was not very active against sarcoma 180 A tumor.

L30 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:149467 HCAPLUS

DOCUMENT NUMBER: 98:149467

TITLE: Dentifrice

INVENTOR(S): Wahmi, Hakeem V. R.
PATENT ASSIGNEE(S): Mathur, Krishan Dyal, USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4374824	A	19830222	US 1981-228791	19810127

PRIORITY APPLN. INFO.: US 1981-228791 19810127

AB A dentifrice composition for cleaning teeth, preventing caries and tooth diseases, and for relieving some of the symptoms caused by tooth disease comprises ginger 2.0-10, Mg silicate 6-16, NaCl 6-16, borax 6.0-16, catechu 2-20, **black pepper** 4-14, alum 4-14, sweet almond seed and shell 2-16, pyrethrum 2-14, mastic 4-20, and tobacco 4-20% by weight Thus, a paste formulated with 50 parts by weight of a powder containing ginger 3.5, Mg silicate 5, rock salt 5, borax 5, catechu 5, **black pepper** 5, alum 5, sweet almond seed and shell 5, pyrethrum 3.5, mastic 5, and tobacco 5 oz, H2O 35 parts and glycerol 15 parts, and applied twice daily to a 10-y-old patient suffering from spongy gums, discolored teeth, crystal deposits and **bacterial infection**, showed improvement to the gums and teeth 1 mo after treatment, and during intermittent exams. for 12 yr the patient maintained excellent teeth with no cavities.

L30 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1975:591635 HCAPLUS
DOCUMENT NUMBER: 83:191635
TITLE: Ethanol vapor sterilization of natural spices and other foods
INVENTOR(S): Wistreich, Hugo E.; Thundiyil, George J.; Juhn, Hyunil
PATENT ASSIGNEE(S): Heller, B., and Co., USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3908031	A	19750923	US 1973-340220	19730312

PRIORITY APPLN. INFO.: US 1973-340220 A 19730312

AB Such foods as wheat flour, oregano, and **black pepper** could be sterilized by contact with EtOH [64-17-5] vapor at 78-150°C. Thus, a ground **black pepper** sample containing 3.8 + 106 bacteria/g was placed in a cylinder dipped in a glycerol bath at 200°F and the pepper was washed by EtOH vapor, supplied from a sep. heated EtOH vessel, for 40 min. The pepper contained 5.7 + 104 bacteria/g.

=> d que stat 132

L28 1 SEA FILE=REGISTRY ABB=ON "BLACK PEPPER OIL"/CN
 L29 931 SEA FILE=HCAPLUS ABB=ON L28 OR ?BLACK?(W)?PEPPER?
 L30 5 SEA FILE=HCAPLUS ABB=ON L29 AND ?BACT?(W)?INFECT?
 L31 6 SEA L30
 L32 6 DUP REMOV L31 (0 DUPLICATES REMOVED)

=> => d ibib abs 132 1-6

L32 ANSWER 1 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2005-222169 [23] WPIDS

CROSS REFERENCE: 1993-386206 [48]; 2003-895239 [82]

DOC. NO. CPI: C2005-071127

TITLE: Treatment of infectious diseases caused by drug-resistant strains of bacteria in human or animal host by administering to area of disease, carrier containing antibacterial agent, i.e. antibacterial phytoalexin, obtainable from, e.g. pepper.

DERWENT CLASS: B04

INVENTOR(S): STAGGS, J J

PATENT ASSIGNEE(S): (STAG-I) STAGGS J J

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2005058729	A1	20050317	(200523)*		15

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2005058729	A1 CIP of	WO 1993-US4763	19930519
	CIP of	US 2000-571644	20000515
		US 2003-620794	20030715

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 2005058729	A1 CIP of	US 6593371

PRIORITY APPLN. INFO: US 2003-620794 20030715; WO
 1993-US4763 19930519; US
 2000-571644 20000515

AN 2005-222169 [23] WPIDS

CR 1993-386206 [48]; 2003-895239 [82]

AB US2005058729 A UPAB: 20050411

NOVELTY - Treating infectious diseases caused by drug-resistant strains of bacteria in a human or an animal host comprising administering to area of disease, a carrier containing an antibacterial agent, i.e. antibacterial phytoalexin, obtainable from pepper, or an equivalent in a therapeutically effective concentration, is new.

ACTIVITY - Antimicrobial; Respiratory-Gen; Neuroprotective; Antiinflammatory; Dermatological; Immunosuppressive; Antitubercular; Tuberculostatic; Fungicide.

A woman with drug-resistant strain of Staphaureus infection was treated with a single application of a lotion made from a tincture of

freshly ground **black pepper**. The tincture was applied to the infected area. It was made from a 70% isopropyl alcohol extraction followed by acetone extraction and evaporated down within a lotion base. The woman reported that the itching disappeared almost immediately upon application of the lotion with a gradual reduction of soreness to the point of being unnoticeable within less than one hour. The appearance of pus and redness also began to gradually fade away until normal, healthy skin and color was completely restored within a day or two.

MECHANISM OF ACTION - None given.

USE - The method is for treating infection disease caused by drug-resistant strains of bacteria in human or animal host (claimed), e.g. infections that result from invasive medical procedures including surgical incisions, catheters, intravascular, and hypodermics, blood sample, or biopsies; general cellulitis, ear infections, eye infections, sinusitis, food poisoning, skin infections, furuncles, folliculitis, scalded skin syndrome, general wound infections, necrotizing fasciitis (flesh eating disease), lung infections, pneumonia, toxic shock syndrome, actinomycosis, nocardiosis, meningitis, or sepsis; or infections caused by gram-positive and gram-negative bacteria including Staphylococcus, Staphylococcus aureus, Hemophilus, Hemophilus influenzae, Pseudomonas, Pseudomonas aeruginosa, Streptococcus, Streptococcus pneumoniae, Streptococcus Group A, Group B, Group C, Group D, Group G, Mycobacterium, Mycobacterium tuberculosis, Clostridium, or Enterobacteriaceae.

ADVANTAGE - The pepper extract possesses antifungal properties, thus it can topically treat **bacterial infections** affecting the skin eyes, or ears. The antibiotic treatment is able to quickly resolve local **bacterial infections** such as those that result from surgical incisions without the need for systemic antibiotic drug therapy, thus reducing or eliminates the risk that the infection will spread and generate into a more serious invasive infection. It also eliminate the harmful and unpleasant side effects and inconvenience associated with longer-term prior art systemic antibiotic therapy. It is low in toxicity, low in cost, safe, more convenient to use, is affordable to the poor, and offers much broader commercial feasibility over prior art treatments.

Dwg.0/13

L32 ANSWER 2 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2005-111211 [12] WPIDS
 CROSS REFERENCE: 2004-784494 [77]; 2004-784495 [77]
 DOC. NO. CPI: C2005-037243
 TITLE: Forming cargo group-cochleate used for treating e.g. inflammation and pain comprises introducing cargo group to liposome in presence of solvent so that cargo group associates with liposome and precipitating liposome.
 DERWENT CLASS: A96 B05 B07 C03 C07
 INVENTOR(S): DELMARRE, D; GOULD-FOGERITE, S; KRAUSE-ELSMORE, S L; LU, R; MANNINO, R J
 PATENT ASSIGNEE(S): (DELM-I) DELMARRE D; (GOUL-I) GOULD-FOGERITE S; (KRAU-I) KRAUSE-ELSMORE S L; (LURR-I) LU R; (MANN-I) MANNINO R J
 COUNTRY COUNT: 1
 PATENT INFORMATION:

PATENT NO	KIND DATE	WEEK	LA	PG
US 2005013854	A1 20050120	(200512)*		106

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2005013854	A1 Provisional	US 2003-461483P	20030409
	Provisional	US 2003-463076P	20030415
	Provisional	US 2003-499247P	20030828
	Provisional	US 2003-502557P	20030911
	Provisional	US 2003-532755P	20031224
	Provisional	US 2004-537252P	20040115
	Provisional	US 2004-556192P	20040324
		US 2004-822230	20040409

PRIORITY APPLN. INFO: US 2004-822230 20040409; US
 2003-461483P 20030409; US
 2003-463076P 20030415; US
 2003-499247P 20030828; US
 2003-502557P 20030911; US
 2003-532755P 20031224; US
 2004-537252P 20040115; US
 2004-556192P 20040324

AN 2005-111211 [12] WPIDS
 CR 2004-784494 [77]; 2004-784495 [77]
 AB US2005013854 A UPAB: 20050218

NOVELTY - Formation (M1) of a cargo group-cochleate (A) comprises introducing a cargo group to a liposome in the presence of a solvent so that the cargo group associates with the liposome and precipitating the liposome to form a cargo group cochleate.

DETAILED DESCRIPTION - Formation (M1) of a cargo group-cochleate (A) comprises introducing a cargo group to a liposome in the presence of a solvent so that the cargo group associates with the liposome and precipitating the liposome to form a cargo group cochleate.

INDEPENDENT CLAIMS are also included for:

- (1) an article which comprises a lipid contained within packaging material which comprises a label or package insert indicating the use of the lipid for forming cochleates or cochleate compositions;
- (2) a composition (C1) comprising an anhydrous cochleate;
- (3) formation (M2) of (C1) which comprises contacting a negatively charged lipid, a protonized cargo group and a divalent metal cation to form a cochleate;
- (4) a kit for the manufacture of cochleates, which comprises an aggregation inhibitor and an instruction for formation of cochleates with the aggregation inhibitor.

ACTIVITY - Antiinflammatory; Analgesic; Fungicide; Antibacterial; Virucide; Antiparasitic; Cytostatic; Immunosuppressive; Anorectic; Antidepressant; Vasotropic; Hypotensive; Hypertensive; Nootropic; Eating-Disorder-Gen.; Neuroleptic; Tranquilizer; Neuroprotective; Antiparkinsonian; Hemostatic; Dermatological; Muscular-Gen.; Antianemic; Antithyroid; Antiarthritic; Antirheumatic; Antipsoriatic; Ophthalmological; Antilipemic; CNS-Gen.; Respiratory-Gen.; Antiasthmatic; Antiarteriosclerotic; Osteopathic; Anti-gout; Antiallergic; Auditory; Gastrointestinal-Gen.; Antiulcer.

No biological data is given.

MECHANISM OF ACTION - None given.

USE - Used for treating inflammation, pain, infection, fungal infection, **bacterial infection**, viral infection, parasitic disorder, immune disorder, genetic disorder, degenerative disorder, cancer, proliferative disorder, obesity, depression, hair loss, impotence, hypertension, hypotension, dementia, senile dementia, malnutrition, acute and chronic leukemia and lymphoma, sarcoma, adenoma,

carcinomas, epithelial cancers, small cell lung cancer, non-small cell lung cancer, prostate cancer, breast cancer, pancreatic cancer, hepatocellular carcinoma, renal cell carcinoma, biliary cancer, colorectal cancer, ovarian cancer, uterine cancer, melanoma, cervical cancer, testicular cancer, esophageal cancer, gastric cancer, mesothelioma, glioma, glioblastoma, pituitary adenomas, schizophrenia, obsessive compulsive disorder, bipolar disorder, Alzheimer's disease, Parkinson's disease, cell proliferative disorders, blood coagulation disorders, dysfibrinogenaemia and hemophilia (A and B), autoimmune disorders, systemic lupus erythematosus, multiple sclerosis, myasthenia gravis, autoimmune hemolytic anemia, autoimmune thrombocytopenia, Grave's disease, allogenic transplant rejection, ankylosing spondylitis, psoriasis, scleroderma, uveitis, eczema, dermatological disorders, hyperlipidemia, hyperglycemia, hypercholesterolemia, cystic fibrosis, muscular dystrophy, headache, arthritis, rheumatoid arthritis, osteoarthritis, atherosclerosis, acute gout, acute or chronic soft tissue damage, asthma, chronic rhinosinusitis, allergic fungal sinusitis, sinus mycetoma, non-invasive fungus induced mucositis, non-invasive fungus induced intestinal mucositis, chronic otitis media, chronic colitis, inflammatory bowel diseases, ulcerative colitis, and Crohn's disease.

ADVANTAGE - The methods are time and cost saving. The cochleates protect the cargo group from the host (e.g. from decomposition by proteolytic enzymes in the digestive tract) and protect the host from the cargo group (e.g., preventing damage to vital organs caused by toxic levels of certain cargo moieties). The cochleates allow for efficient delivery of the cargo group across the digestive tract and to cells e.g. by fusion and/or cellular uptake, so that a lower dosage of cargo group can be administered to generate the same beneficial results as compared to conventional preparations, while minimizing the incidence of toxic side effects and/or buildup of cargo group in the digestive tract.

Dwg.0/64

L32 ANSWER 3 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2004-784495 [77] WPIDS
 CROSS REFERENCE: 2004-784494 [77]; 2005-111211 [12]
 DOC. NO. CPI: C2004-274532
 TITLE: Formation of cargo moiety-cochleate, useful for treating inflammation, pain, infection, or fungal infection involves introducing cargo moiety to liposome in presence of solvent followed by precipitation.
 DERWENT CLASS: A96 B04 B05 D16
 INVENTOR(S): DELMARRE, D; GOULD-FOGERITE, S; KRAUSE-ELSMORE, S L; LU, R; MANNINO, R J
 PATENT ASSIGNEE(S): (BIOD-N) BIODELIVERY SCI INT INC; (UYNE-N) UNIV NEW JERSEY MEDICINE & DENTISTRY
 COUNTRY COUNT: 108
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004091578	A2	20041028	(200477)*	EN	195
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE					
LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE					
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG					
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ					
OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG					
US UZ VC VN YU ZA ZM ZW					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004091578	A2	WO 2004-US11026	20040409

PRIORITY APPLN. INFO: US 2004-537252P 20040115; US
 2003-461483P 20030409; US
 2003-463076P 20030415; US
 2003-499247P 20030828; US
 2003-502557P 20030911; US
 2003-532755P 20031224

AN 2004-784495 [77] WPIDS
 CR 2004-784494 [77]; 2005-111211 [12]
 AB WO2004091578 A UPAB: 20050218

NOVELTY - Formation (F1) of a cargo moiety-cochleate (A1) involves: introducing a cargo moiety to a liposome in the presence of a solvent such that the cargo moiety associates with the liposome; and precipitating the liposome to form a cargo moiety-cochleate.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(a) an article of manufacture comprising packaging material and a lipid contained within the packaging material. The packaging material comprises a label or package insert indicating the use of the lipid for forming cochleates or cochleate compositions;

(b) a composition comprising an anhydrous cochleate; and

(c) formation (F2) of an anhydrous cochleate involving containing a negatively charged lipid, a protonized cargo moiety and a divalent metal cation.

ACTIVITY - Antiinflammatory; Analgesic; Antimicrobial; Fungicide; Antibacterial; Virucide; Antiparasitic; Immunomodulator; Cytostatic; Anorectic; Antidepressant; Vasotropic; Hypotensive; Nootropic; Eating-Disorder-Gen.; Neuroleptic; Tranquilizer; Neuroprotective; Antiparkinsonian; Hemostatic; Anticoagulant; Immunosuppressive; Muscular-Gen.; Neuroprotective; Antianemic; Antithyroid; Antiarthritic; Antirheumatic; Antipsoriatic; Dermatological; Ophthalmological; Antilipemic; CNS-Gen.; Respiratory-Gen.; Osteopathic; Antiarteriosclerotic; Antigout; Antiasthmatic; Auditory; Gastrointestinal-Gen.; Antiulcer.

MECHANISM OF ACTION - None given.

USE - For treating inflammation, pain, infection, fungal infection, **bacterial infection**, viral infection, parasite disorders, an immune disorder, genetic disorders, degenerative disorders, cancer, proliferative disorders, obesity, depression, hair loss, impotence, hypertension, hypotension, dementia, senile dementia, malnutrition, acute or chronic leukemia or lymphoma, sarcoma, adenoma, carcinomas, epithelial cancer, small cell lung cancer, non-small cell lung cancer, prostate cancer, breast cancer, pancreatic cancer, hepatocellular carcinoma, renal cell carcinoma, biliary cancer, colorectal cancer, ovarian cancer, uterine cancer, melanoma, cervical cancer, testicular cancer, esophageal cancer, gastric cancer, mesothelioma, glioma, glioblastoma, pituitary adenomas, schizophrenia, obsessive compulsive disorder (OCD), bipolar disorder, Alzheimer's disease, Parkinson's disease, cell proliferative disorders, blood coagulation disorders, Dysfibrinogenaemia and hemophilia (A and B), autoimmune disorders, systemic lupus erythematosus, multiple sclerosis, myasthenia gravis, autoimmune hemolytic anemia, autoimmune thrombocytopenia, Grave's disease, allogenic transplant rejection, ankylosing spondylitis, psoriasis, scleroderma, uveitis, eczema, dermatological disorders, hyperlipidemia,

hyperglycemia, hypercholesterolemia, cystic fibrosis, muscular dystrophy, headache, arthritis, rheumatoid arthritis, osteoarthritis, atherosclerosis, acute gout, acute or chronic soft tissue damage, asthma, chronic rhinosinusitis, allergic fungal sinusitis, sinus mycetoma, non-invasive fungus induced mucositis, non-invasive fungus induced intestinal mucositis, chronic otitis, media, chronic colitis, inflammatory bowel disease, ulcerative colitis or Crohn's disease (all claimed).

ADVANTAGE - The cochleate safely and effectively deliver cargo moieties that are poorly absorbed by the body. The cochleate obtained is cost-effective and time perspective. The cochleate minimizes the incidence of toxic side effects and/or buildup of cargo moiety in the digestive tract. The cochleate avoids harmful side effects of drugs caused by their high concentration or presence of organs such as kidneys, stomach or liver.

Dwg.0/64

L32 ANSWER 4 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2004-411411 [38] WPIDS
 DOC. NO. CPI: C2004-154395
 TITLE: Geodate delivery vehicle for cargo moiety, useful to treat e.g. inflammation, pain, infection, immune disorders, cancer, diabetes, insomnia and depression, comprises lipid monolayer disposed about a hydrophobic domain.
 DERWENT CLASS: B05 B07 D13
 INVENTOR(S): DELMARRE, D; GOULD-FOGERITE, S; KRAUSE-ELSMORE, S L; LU, R; MANNINO, R J; KRAUSE, S L
 PATENT ASSIGNEE(S): (BIOD-N) BIODELIVERY SCI INT INC
 COUNTRY COUNT: 107
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2004041247	A2	20040521 (200438)*	EN	63	
RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE					
LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE					
DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG					
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM					
PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US					
UZ VC VN YU ZA ZM ZW					
US 2004146551	A1	20040729 (200450)			
AU 2003296923	A1	20040607 (200469)			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004041247	A2	WO 2003-US35136	20031103
US 2004146551	A1	US 2002-422989P	20021101
	Provisional	US 2003-440284P	20030114
	Provisional	US 2003-507361P	20030929
		US 2003-701364	20031103
AU 2003296923	A1	AU 2003-296923	20031103

FILING DETAILS:

PATENT NO	KIND	PATENT NO

AU 2003296923 A1 Based on WO 2004041247

PRIORITY APPLN. INFO: US 2003-507361P 20030929; US
2002-422989P 20021101; US
2003-440284P 20030114; US
2003-701364 20031103

AN 2004-411411 [38] WPIDS

AB WO2004041247 A UPAB: 20040616

NOVELTY - Geodate delivery vehicle (I) for a cargo moiety (II) comprises a lipid monolayer (A) disposed about a hydrophobic domain (B), where either (A) comprises a phospholipid, or (I) comprises a lipid strata disposed about (A).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for
(1) a packaged (I) comprising (I) packaged with instructions for adding the vehicle to a food, beverage or personal care product;
(2) a food item (2) comprising (I);
(3) a personal care product comprising (I);
(4) a packaged (I) comprising (I) packaged with instructions for incorporating a cargo moiety; and
(5) a method (3) of manufacturing (I) for a cargo moiety comprising mixing a lipid, an aqueous solution and a hydrophobic material, such that (I) is formed comprising (A) disposed about (B).

ACTIVITY - Antiinflammatory; Analgesic; Antimicrobial; Fungicide; Antibacterial; Virucide; Antiparasitic; Immunomodulator; Cytostatic; Antidiabetic; Hypnotic; Anorectic; Antidepressant; Vasotropic; Hypotensive; Hypertensive; Nootropic; Eating-Disorders-Gen.

MECHANISM OF ACTION - None given.

USE - (I) is useful to treat (such as inflammation, pain, infection, fungal infection, **bacterial infection**, viral infection, parasitic disorders, an immune disorder, genetic disorders, degenerative disorders, cancer, diabetes, insomnia, proliferative disorders, obesity, depression, hair loss, impotence, hypertension, hypotension, dementia, senile dementia or malnutrition) a subject, who can be benefit from the administration of a cargo moiety and a nutrient (claimed). Test details are described but no results are given.

ADVANTAGE - The multiple cargo moieties also can be incorporated into (I). (I) protects stomach from the cargo moiety and (I) involves no solvent and highly stable e.g. they can withstand extreme temperature and pressure. (I) has ability to mask the taste and/or odor of cargo moieties.
Dwg.0/19

L32 ANSWER 5 OF 6 MEDLINE on STN
ACCESSION NUMBER: 2000200815 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10736000
TITLE: Antimicrobial agents from plants: antibacterial activity of plant volatile oils.
AUTHOR: Dorman H J; Deans S G
CORPORATE SOURCE: Aromatic and Medicinal Plant Group, Scottish Agricultural College, Auchincruive, South Ayrshire, UK.
SOURCE: Journal of applied microbiology, (2000 Feb) 88 (2) 308-16.
Journal code: 9706280. ISSN: 1364-5072.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200004
ENTRY DATE: Entered STN: 20000505
Last Updated on STN: 20000505
Entered Medline: 20000427

AB The volatile oils of **black pepper** [*Piper nigrum* L. (Piperaceae)], clove [*Syzygium aromaticum* (L.) Merr. & Perry (Myrtaceae)], geranium [*Pelargonium graveolens* L'Herit (Geraniaceae)], nutmeg [*Myristica fragrans* Houtt. (Myristicaceae)], oregano [*Origanum vulgare* ssp. *hirtum* (Link) Letsw. (Lamiaceae)] and thyme [*Thymus vulgaris* L. (Lamiaceae)] were assessed for antibacterial activity against 25 different genera of bacteria. These included animal and plant pathogens, food poisoning and spoilage bacteria. The volatile oils exhibited considerable inhibitory effects against all the organisms under test while their major components demonstrated various degrees of growth inhibition.

L32 ANSWER 6 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 1983-24924K [10] WPIDS

DOC. NO. CPI: C1983-024387

TITLE: Dentifrice giving effective tooth cleaning and preventing caries - contains ginger, magnesium silicate, salt, borax, catechu, **black pepper**, alum, almond, pyrethrum, mastic and tobacco.

DERWENT CLASS: B05 D21

INVENTOR(S): WAHMI, H V R

PATENT ASSIGNEE(S): (MATH-I) MATHUR K D

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 4374824	A	19830222	(198310)*		6

PRIORITY APPLN. INFO: US 1981-228791 19810127

AN 1983-24924K [10] WPIDS

AB US 4374824 A UPAB: 19930925

Dentifrice compsn. comprises 2-10 weight% ginger, 6-16 weight% Mg silicate, 6-16

weight% MaCl, 6-16 weight% borax, 2-20 weight% catechu, 4-14 weight% piper nigrum,

4-14 weight% alum, 2-16 weight% seed and shell of sweet almond, 2-14 weight% pyrethrum, 4-20 weight% mastic and 4-20 weight% tobacco.

The ingredients compliment each other in providing an effective dentifrice compsn. which not only more effectively cleans the teeth but assists in the prevention of caries and tooth disease and relieves the symptoms resulting from existing tooth and gum problems such as bleeding gums, **bacterial infection**, plaque build up and gingivitis.